

Green Achiever Technical Newsletter March 2010

Dear

Spring is here (we're on British summer time but even I wouldn't go that far as yet) so what's new for the season? With the April showers predicted we're looking at the concept of the Water Footprint. Also, with the Feed-in Tariffs now coming on-line this month we remind people of this as an option for micro power generation.

Yet again, there is the monthly round up of prosecutions just to remind everyone of why we try to keep you up to date with what's happening.

DEVELOPING A WATER FOOTPRINT

Environmental awareness and strategy is often part of what business regards as its 'Corporate Social Responsibility'. Many measure and work on reducing their carbon footprint and report on this in annual reports. Fortunately, an increasing number of companies recognise that reducing their Water Footprint should also be a part of their corporate environmental strategy. Monday 22nd March was World Water Day aimed at raising awareness of the need to manage and conserve water – even in the UK where we've not been short of fresh water in the past few months!

A water footprint is calculated by the volume of freshwater used to produce the product, measured over various steps of the production chain. Water use is measured in terms of water volumes consumed or polluted. The water footprint shows volumes of water use and pollution and also locations which is relevant because the impact of water use depends on local conditions. The footprint generally breaks down into three components:-

- Blue water – surface and ground water;
- Green water – rainwater stored in the soil; and
- Grey water –polluted water.

By reducing water consumption you can also reduce the carbon footprint of your business, for example, for every 1 m³ of water saved, you will save approximately 1 kg of CO₂ equivalent¹. The water footprint is still a relatively new concept but it is one we are likely to hear more about in years to come.

1. Water UK Sustainability Indicators 2007/8

FEED-IN TARIFFS

From **April 2010** you will be able to sell any surplus electricity you generate from small-scale low-carbon electricity to the major electricity suppliers at a fixed rate to help offset the cost of installing plant. The Energy Act 2008 provided broad enabling powers for the introduction of feed-in tariffs (FITs) for small-scale low-carbon electricity generation, up to a maximum limit of 5 megawatts (MW) capacity - 50 kilowatts (KW) in the case of fossil fuelled CHP. The FITs will be introduced through changes to electricity distribution and supply licences.

These provisions are intended to encourage the uptake of small-scale low-carbon energy technologies while the Renewable Obligation (RO) continues to be the main support mechanism for large scale renewables deployment.

Small-scale low-carbon electricity technologies include:

- Solar photovoltaics (PV);
- Wind turbines (including micro wind turbines);
- Micro-hydro;
- Combined heat and power (CHP) – this also includes micro CHP; the technology is not always renewable.

FITs will guarantee a price for a fixed period for electricity generated using small-scale low carbon technologies. This increased certainty is aimed to encourage the installation of small-scale low carbon electricity generation technologies.

PROSECUTIONS

Air pollution

Castle Cement, now Hanson Cement, had to pay almost £305,000 in fines and costs for failing to run its Padeswood plant properly, causing dust emissions and noise nuisance and a danger to health.

Environment Agency officials installed CCTV cameras surreptitiously which showed that they were not being notified of emissions as they should have been.

The company admitted that it failed to maintain all plant and equipment in a good operating condition, failed to comply with enforcement notices, failed to operate appropriate techniques to minimise dust emissions and failed to control excess noise and vibration.

Water pollution

VWS (UK) Limited, of Marlow, was fined a total of £40,000 and ordered to pay prosecution costs of £11,052.93 and a victim surcharge of £15 for allowing brewery effluent to pollute a river in North Yorkshire for more than a year.

VWS held environmental permits in 2008 and 2009 to operate effluent treatment plants for two breweries in Tadcaster. The treatment plants were designed for the effluent to pass through a variety of processes before being discharged into the River Wharfe in a state which would not cause pollution to the river or the environment.

Between 2 June 2008 and 26 July 2009 the company was regularly in breach of discharge limits from the treatment plant for the Scottish and Newcastle Brewery, when biological oxygen demand levels were up to 27 times higher than permitted.

In passing sentence, the magistrates noted that this was a systematic failure by VWS to prevent the discharges and was due to poor management systems, and that the breaches had occurred over a lengthy period of time.